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PTO/SB/21 (08-00)
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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	08/767,928
Filing Date	December 17, 1996
First Named Inventor	Dryer
Group Art Unit	2312
Examiner Name	Starks
Total Number of Pages in This Submission	17
Attorney Docket Number	AT9-96-312

ENCLOSURES *(check all that apply)*

- ☐ Fee Transmittal Form
  - ☐ Fee Attached
- ☐ Amendment / Reply
  - ☐ After Final
  - ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☐ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Response to Missing Parts/ Incomplete Application
  - ☐ Response to Missing Parts under 37 CFR 1.52 or 1.53
- ☐ Assignment Papers *(for an Application)*
- ☐ Drawing(s)
- ☐ Licensing-related Papers
- ☐ Petition
- ☐ Petition to Convert to a Provisional Application
- ☐ Power of Attorney, Revocation Change of Correspondence Address
- ☐ Terminal Disclaimer
- ☐ Request for Refund
- ☐ CD, Number of CD(s) _____
- ☐ After Allowance Communication to Group
- ☐ Appeal Communication to Board of Appeals and Interferences
- ☑ Appeal Communication to Group *(Appeal Notice, Brief, Reply Brief)* in triplicate
- ☐ Proprietary Information
- ☐ Status Letter
- ☑ Other Enclosure(s) *(please identify below)*: self-addressed, postage paid postcard

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Andrea Pair Bryant
Signature	Andrea Pair Bryant
Date	6 August 2001

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FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT ($)

Complete if Known	
Application Number	08/767,928
Filing Date	December 17, 1996
First Named Inventor	Dryer
Examiner Name	Starks
Group Art Unit	2312
Attorney Docket No.	AT9-96-312

METHOD OF PAYMENT

1. [✓] The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:
   Deposit Account Number: 09-0447
   Deposit Account Name: IBM Corp.
   [✓] Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17
   [ ] Applicant claims small entity status. See 37 CFR 1.27
2. [ ] **Payment Enclosed:**
   [ ] Check [ ] Credit card [ ] Money Order [ ] Other

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
101	710	201	355	Utility filing fee	
106	320	206	160	Design filing fee	
107	490	207	245	Plant filing fee	
108	710	208	355	Reissue filing fee	
114	150	214	75	Provisional filing fee	

SUBTOTAL (1) ($)

2. EXTRA CLAIM FEES

		Extra Claims		Fee from below	Fee Paid
Total Claims		-20** =		X	=
Independent Claims		- 3** =		X	=
Multiple Dependent					=

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description
103	18	203	9	Claims in excess of 20
102	80	202	40	Independent claims in excess of 3
104	270	204	135	Multiple dependent claim, if not paid
109	80	209	40	** Reissue independent claims over original patent
110	18	210	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) ($)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for *ex parte* reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	390	216	195	Extension for reply within second month	
117	890	217	445	Extension for reply within third month	
118	1,390	218	695	Extension for reply within fourth month	
128	1,890	228	945	Extension for reply within fifth month	
119	310	219	155	Notice of Appeal	
120	310	220	155	Filing a brief in support of an appeal	
121	270	221	135	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,240	241	620	Petition to revive - unintentional	
142	1,240	242	620	Utility issue fee (or reissue)	
143	440	243	220	Design issue fee	
144	600	244	300	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Processing fee under 37 CFR 1.17(q)	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	710	246	355	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	710	249	355	For each additional invention to be examined (37 CFR § 1.129(b))	
179	710	279	355	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid SUBTOTAL (3) ($)

SUBMITTED BY				Complete (if applicable)	
Name (Print/Type)	Andrea Pair Bryant	Registration No. (Attorney/Agent)	28,191	Telephone	(512) 345-5806
Signature	Andrea Pair Bryant			Date	6 Aug 01

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#15/Reply Brief
I, MC Reply Brief
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AT9-96-0312

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	David C. Dryer et al.
Serial No.:	**08/767,928**
Filing Date:	December 17, 1996
Group Art Unit:	2312
Examiner:	W. Starks
For:	**Selection of Graphical User Interface Agents by Cluster Analysis**

Commissioner for Patents
Washington, D.C. 20231

REPLY BRIEF

This paper is responsive to the EXAMINER'S ANSWER dated June 12, 2001. In this narrative, Applicants use 'cluster(s)' and 'group(s)' interchangeably.

Applicants thank the Examiner for pointing out the changes needed to their statement of the status of claims, issues to be decided and grouping of claims.

Applicants continue to disagree with the Examiner with regard to the meaning of *AT&T Corp. v. Excel Communications, Inc. 50 USPQ2d 1447* (*AT&T*) as it pertains to 35 USC § 101 and with regard to the appropriate interpretation of Suarez.

Applicants' invention, as described and claimed, relates to improvements in applying intelligent agents to human-computer interaction tasks. Specifically, the claims on appeal relate to deriving as many mutually exclusive clusters of tasks as there are intelligent agents to assign by performing an analysis on data assessing at least two user assessment variables for each of the tasks, and linking each of the intelligent agents with one of the mutually exclusive clusters. It is the intelligent agent which has been linked to a cluster which contains the task selected by a user that is displayed when the task is selected. The invention provides different agents as a function of the user chosen task to guide the user through performance of the task. The invention utilizes statistical analysis of certain user assessment variables to group tasks. The group to which a task is associated indicates how much assistance a user requires to successfully perform a given task.

Independent claims 1, 5 and 8 are method, system and computer program product, respectively, analogues of each other. Each comprises four elements related to receiving task assessment data; performing multivariate analysis on the data to derive at least as many task clusters as there are intelligent agents to assign; storing an association linking each agent with one of the task clusters; and, upon user selection of a task, displaying the intelligent agent associated with the task cluster to which the user selected task belongs.

ARGUMENT

CLAIMS 1 - 7 DEFINE STATUTORY SUBJECT MATTER UNDER 35 USC § 101

Applicants continue to assert that all claims on appeal describe statutory subject matter under § 101. The Examiner for the first time states his reliance on *In re Warmerdam* for his § 101 rejection.

Applicants believe the Examiner has focused on Applicants' citation from *AT&T* without considering what follows. The next two sentences relate to the CAFC's discussion pertaining to recitation of use, i.e. practical application, bringing a claim including a mathematical algorithm within the constraints of § 101 . Applicants refer also to the first full paragraph on page 6 of their Appeal Brief.

Further, Applicants cite *AT&T* "It is clear from the written description of the '184 patent that AT&T is only claiming a process that uses the Boolean principle in order to determine the value of the PIC indicator ... Because the claimed process applies the Boolean principle to produce a useful, concrete tangible result without pre-empting other uses of the mathematical principle, on its face the claimed process falls within the scope of 101 (citations omitted)." Applicants assert that according to the CAFC in *AT&T* claims for computer implemented algorithm-inventions are statutory under § 101 so long as the invention as a whole produces a tangible, useful result.

The CAFC points out that *In re Warmerdam* is not to the contrary, noting that "The court found that the claimed process did nothing more than manipulate basic mathematical constructs..." Applicants' invention rises above *Warmerdam* since Applicants' invention does more than manipulate basic mathematical constructs. The claims on appeal use statistical analysis to form groups (clusters) of tasks and thereafter assign an intelligent agent to each group so that when a user chooses a task, the previously associated intelligent agent is displayed to guide the user. Whether described as method, system or computer program product, the present invention produces a tangible, useful result -- an appropriate intelligent agent at the user-machine interface to facilitate the user's performing a user chosen task. Applicants respectfully submit that the invention, as a whole, produces a tangible, useful result; and, as such, the claims define statutory subject matter.

CLAIMS 1, 5 and 8 ARE NOT ANTICIPATED UNDER 35 USC § 102 BY SUAREZ

It is well established that for a § 102 reference to anticipate the invention as claimed, the reference must contain each element of the claimed invention. "A claim is anticipated only if each and every element of the claim is found, either expressly or inherently, in a single prior art reference." *Verdegaal Bros., Inc. v. Union Oil. Co.*, 814 F.2d 628, 631. Not only must the elements appear, they must interact to produce in essentially the same way the same result achieved by the claim being examined. "A claim is anticipated and therefore invalid only when a single prior art reference discloses each and every limitation of the claim." *Glaxo Inc. v. Novopharm, Ltd.*, 52 F.3d 1043, 1047.

Applicants respectfully submit that the Examiner has confused what the invention as a whole "produces" with what the invention as a whole "is" (including each and every claimed element) in the Examiner's anticipation rejection of claims 1, 5 and 8. It is clear that the Examiner has focused only on the tangible, useful result of the claimed invention, i.e., displaying in a user interface an intelligent agent when a task is selected by the user, in his argument that Suarez anticipates Applicants' claimed invention. For example, the Examiner's Answer argument D, page 10, focuses on the fact that the three variables - task difficulty, task importance, task frequency - are not recited in the claims. Applicants' point, referred to by the Examiner as argument E, is that the variables do not have to be recited in the claims because Suarez does not teach, or even suggest, "user assessment variables" which element is specifically claimed. The Examiner failed to directly respond to this argument other than to continue to rely on his previous statement regarding those three variables not being recited in the claim.

Applicants' claims affirmatively recite limitations which are not anticipated by Suarez. The Examiner has failed to show anticipation of elements specifically claimed, e.g., the first three elements of claim 1.

To anticipate an invention, a reference must disclose every element of the claim(s) doing essentially the same function to achieve substantially the same result. Suarez simply does not meet the limitations recited in the claims on appeal. While Suarez does disclose intelligent agents "...executing on the computer hosts...", Suarez neither teaches nor suggests each of the following elements required, e.g., by Applicants' claim 1:

... receiving data assessing at least two user assessment variables for each of a plurality of tasks;

performing multivariate analysis on said data to derive from said plurality of tasks at least as many mutually exclusive clusters of tasks as there are intelligent agents to assign;

storing an association linking each of said intelligent agents with one of said mutually exclusive clusters; ...

The use by Suarez of intelligent agents and the elements recited in the claims on appeal appear to be the only reason the Examiner has for deeming Suarez to be anticipatory art. In the absence of Applicants' claims nothing is offered by the Examiner to justify modifying the teachings of Suarez to approximate the present invention.

CONCLUSION

Applicants submit that claims 1 - 7 describe statutory subject matter under 35 USC § 101 and that none of the appealed claims 1, 5 and 8 is anticipated under 35 USC § 102 by Suarez.

Respectfully submitted,

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